

**REMARKS**

In accordance with the foregoing, claims 5-11, 17, 21, 23, 25, 29, and 30 have been amended. Claims 1-4, 12-16, 24, and 31 have been cancelled, without prejudice or disclaimer.

Claims 5-11, 17-23, and 31 stand rejected and claims 25-30 stand objected. Because claims 25 and 29 have been amended as independent claims, claims 25 to 30 should be allowable.

Claims 5-11, 17-23, 25-27, and 32-41 are pending and under consideration.

**INFORMATION DISCLOSURE STATEMENT:**

In the Office Action, the references submitted in an IDS on August 16, 2001, were acknowledged except for the reference submitted titled "Doubling of PDP Resolution for Moving Pictures by Use of a Virtual Pixel Technique," pages 703-706 to Yamada et al. Such reference is presently used to reject the claims of the present invention. A copy of the PTO-1449 form is submitted herewith and it is respectfully requested that the Examiner acknowledges such reference and returns an initialed copy to the PTO-1449 form to the Applicants' representative.

**OBJECTIONS TO THE CLAIMS:**

In the Office Action, at page 2, claim 29 was objected as the claim should be dependent from claim 25. Claim 29 has been amended to independent form. It is respectfully requested that the objection to claim 29 be withdrawn.

**REJECTION UNDER 35 U.S.C. § 112:**

In the Office Action, at page 2, claims 9-11 and 21-23 were rejected under 35 U.S.C. § 112, second paragraph, for the reasons set forth therein. The claims have been amended to improve clarity of the claimed features thereof and in consideration of the rejection presented in the Office Action. In view of the amendments made to claims 9 and 21, Applicants respectfully clarify that the claims recite that the limiting of the pitch of the pixels is done using the speed of motion of the image and the number of redundant light-emitting blocks. It is respectfully asserted that one of ordinary skilled in the art would be able to understand that by using both factors, the pitch of the pixels may be limited. Accordingly, it is respectfully requested that the rejection to the claims be withdrawn.

**REJECTION UNDER 35 U.S.C. § 102:**

In the Office Action, at page 2, claims 1-4, 12-16, 24, and 31 were rejected under 35 U.S.C. § 102 in view of JP 2000-163013 to Maekawa et al. ("Maekawa"). This rejection is traversed and reconsideration is requested.

Maekawa generally describes a halftone display method for a display device where a moving processing of moving light emitting positions of respective subfields with respect to display data of a prescribed field is applied, and the presence or absence of light emissions of the subfields is determined based on original information prior to the applying of the moving processing of the light emitting positions of the subfields. However, Maekawa fails to teach or suggest, "controlling light emission of each subframe, corresponding to the tracks substantially included in an area of the specific pixel on the retina, based on a move direction and a speed of motion of the input image that moves on the display panel, such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image," as recited in independent claim 5.

Similarly, the cited reference fails to teach or suggest, "a control unit controlling light emission of each subframe, corresponding to the tracks substantially included in an area of the specific pixel on the retina, based on a move direction and a speed of motion of the input image that moves on the display panel, such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image," as recited in independent claim 17.

Independent claims 32 and 37 recite, "controlling light emission of subframes in the determined one pattern based on positioning information of the subframes in the specific pixel on the retina, with priority, when the at least two subframes having the same intensity level are included in an area of the specific pixel on the retina," and independent claims 35 and 40 recite, "preparing M sets of N subframes in the one frame," "setting a pitch of virtual pixels on the retina to 1/M-th pitch of real pixels on the display panel," "determining light emission of subframes to the virtual pixels on the retina based on a move direction and a speed of motion of the real pixels on the display panel," and "controlling luminance of a virtual pixel on the retina having the 1/M-th pitch of real pixels on the display panel to become substantially equal to the luminance of a pixel corresponding to an input image." In contrast, Maekawa generally provides that the presence or absence of light emissions of the subfields is determined based on original information prior to

the applying of the moving processing of the light emitting positions of the subfields as to subfields which are to be removed from light emitting objects completely.

In view of the foregoing, it is respectfully requested that independent claims 5, 17, 32, 35, 37, and 40 and related dependent claims be allowed.

**REJECTION UNDER 35 U.S.C. § 103:**

In the Office Action, at page 5, claims 5-9 and 17-21 were rejected under 35 U.S.C. § 103(a) as being as being obvious in view of Maekawa and "Doubling of PDP Resolution for Moving Pictures by Use of a Virtual Pixel Technique," pages 703-706 to Yamada et al. ("Yamada").

The arguments presented above supporting the patentability of independent claims 5, 17, 32, 35, 37, and 40 in view of Maekawa are incorporated herein. Further, Yamada generally describes a virtual pixel technique to double the effective PDP resolution for moving pictures. However, similarly to Maekawa, Yamada fails to teach or suggest, "controlling light emission of each subframe, corresponding to the tracks substantially included in an area of the specific pixel on the retina, based on a move direction and a speed of motion of the input image that moves on the display panel, such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image," as recited in independent claim 5.

Similarly, a combination of the cited references would be silent as to teaching or suggesting, "a control unit controlling light emission of each subframe, corresponding to the tracks substantially included in an area of the specific pixel on the retina, based on a move direction and a speed of motion of the input image that moves on the display panel, such that luminance of the specific pixel on the retina becomes substantially equal to the luminance of a pixel corresponding to the input image," as recited in independent claim 17.

Accordingly, it is respectfully requested that independent claims 5 and 17 and related dependent claims be allowed.

**CONCLUSION:**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for

allowance, which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 01/05/2004

By:   
Alicia M. Choi  
Registration No. 46,621

1201 New York Avenue, NW, Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501